

In the Specification:

Please amend the paragraph beginning on page 1, line 2, as follows:

Technical Field of the Invention

Please amend the paragraph beginning on page 1, line 3, as follows:

A1
~~The present invention relates generally to semiconductor devices; and, more~~
particularly, to a A bit stream processing apparatus for storing a bit stream in a
circular buffer without separately storing a header and data of the bit stream is
disclosed.

Please amend the paragraph beginning on page 1, line 8, as follows:

Description of the Prior Related Art

Please amend the paragraph beginning on page 2, line 6, as follows:

Summary of the Invention Disclosure

Please amend the paragraph beginning on page 2, line 7, as follows:

A2
~~In accordance with an aspect of the invention, an An apparatus is provided for~~
processing a bit stream. The apparatus includes a circular buffer for storing a
transmitted bit stream; a first register for storing data indicating a first read point of
the bit stream stored in the circular buffer; and a first backup register for backing up
the data stored in the first register. The apparatus also includes a second register for
storing data indicating a number of bits to be read from the circular buffer; a third
register for storing data indicative of the number of bits to be ignored from the read
point; and a second backup register for backing up the data stored in the third register.
In addition, the apparatus is provided with an adder for adding the data stored in the
second register and the data stored in the third register; and a controller responsive to
the adder to determine a number of bits to be shifted to read desired data from the
circular buffer.

Please amend the paragraph beginning on page 2, line 20, as follows:

A3
~~In accordance with another aspect of the invention, an An apparatus is also~~
provided for reading data from a circular buffer storing data in a plurality of memory

A3 words. The apparatus includes a first storage device for storing data indicative of a desired number of bits to be read; a second storage device for storing data indicative of a first bit to be read in a first memory word; and a shifter for receiving data stored in the first memory word and data stored in the second memory word located adjacent the first memory word in the circular buffer. The apparatus also includes a logic circuit in communication with the first and second storage devices for controlling the shifter to shift a number of bits specified by the data in the first and second storage devices to align the data in the shifter in a read position.

Please amend the paragraph beginning on page 3, line 9, as follows:

A4 ~~In accordance with another aspect of the invention, an~~ An apparatus is also provided for reading data from a circular buffer storing data in a plurality of memory words which includes a first masking circuit and a second masking circuit. The first masking circuit receives data contained in at least two memory words of the circular buffer. The at least two memory words include data to be read. When a rightmost bit of the received data is not part of the data to be read, the first masking circuit outputs a subset of the received data which includes at least the data to be read but excludes at least the rightmost bit. The second masking circuit masks unwanted bits from the output of the first masking circuit.

Please amend the paragraph beginning on page 3, line 19, as follows:

A5 ~~In accordance with another aspect of the invention, Further,~~ a method is provided for reading data from a circular buffer storing data in a plurality of memory words. The method comprises the steps of: identifying at least one of the memory words containing data to be read; identifying a number of bits to be read; identifying a first bit to be read; retrieving all data in the memory words of the circular buffer storing data to be read; inputting the retrieved data to a shifter; summing the number of bits to be read with a number of bits to be ignored adjacent the first bit to be read to develop a sum; subtracting the sum from a predetermined number to determine a shift amount; shifting the data in the shifter by the shift amount to remove unwanted bits adjacent a last bit to be read; masking unwanted bits adjacent the first bit to be read; and outputting the bits to be read.
